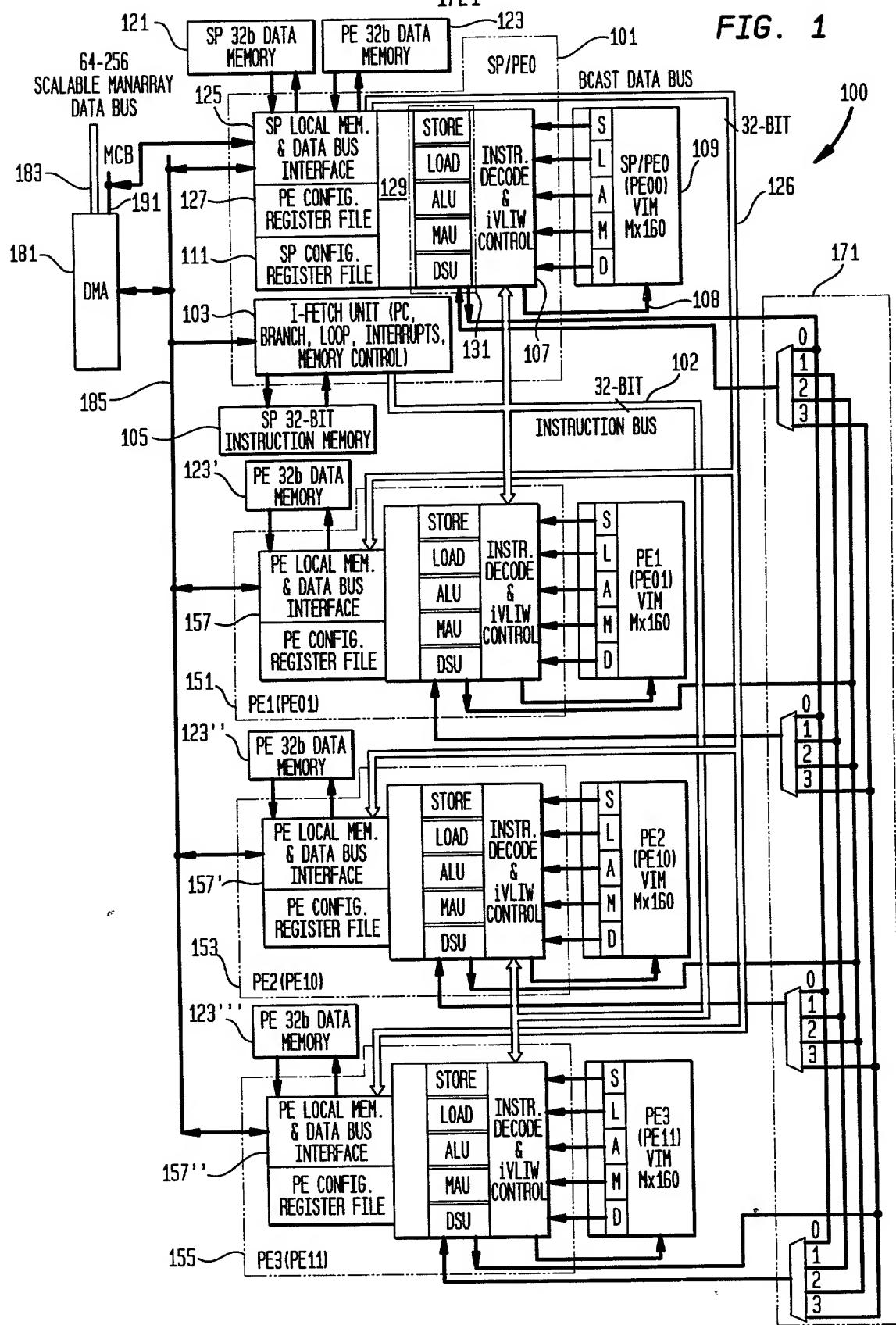


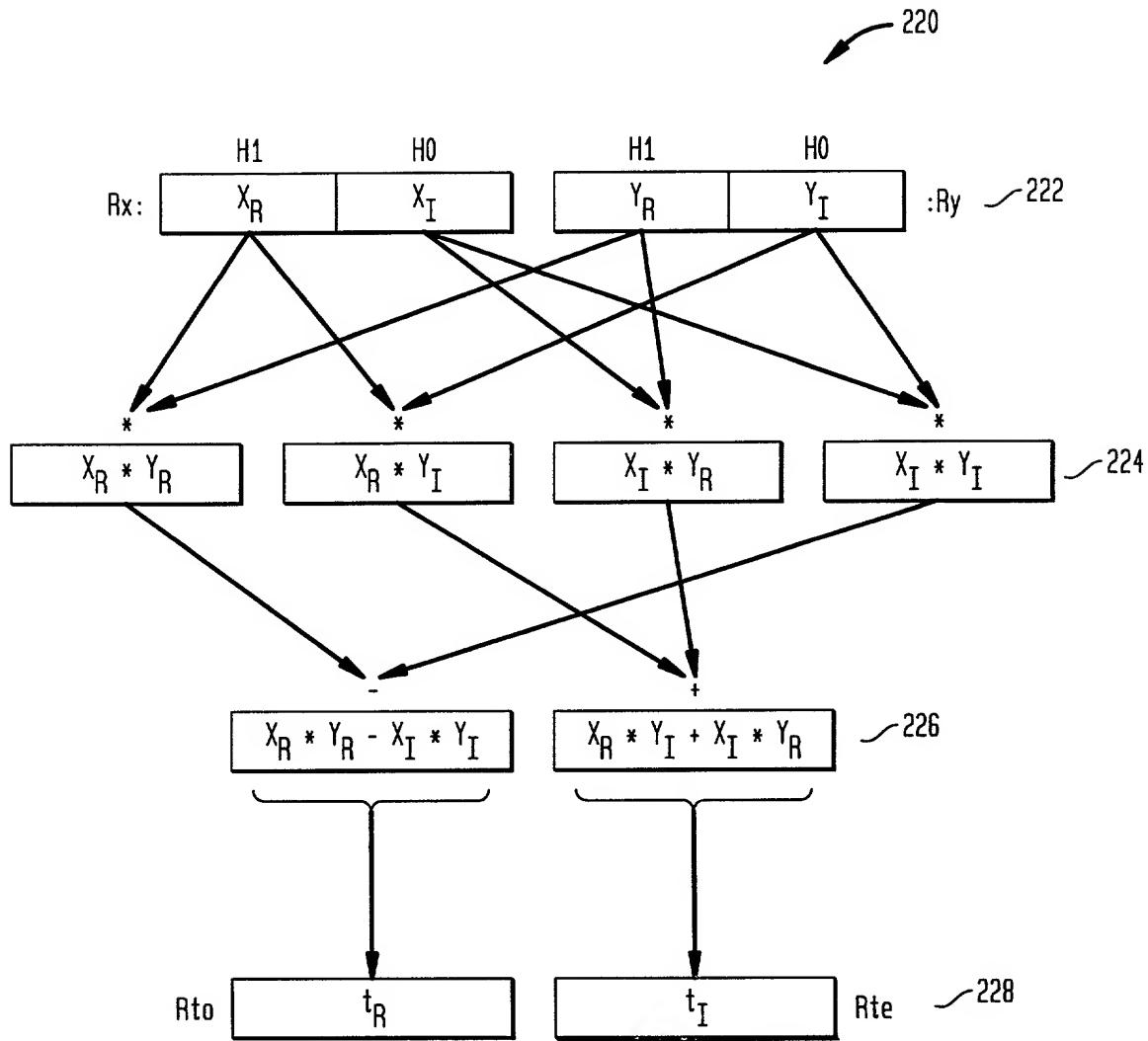
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FIG. 2C



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FIG. 3A

ENCODING

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
GROUP	S/P	UNIT			MAUopcode		Rte		0		Rx				Ry		CE3	ME													

300

FIG. 3B

SYNTAX/OPERATION

INSTRUCTION	OPERANDS	OPERATION	ACF
DUAL HALFWORDS			
MPYCXJL.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION BELOW BUT DO NOT AFFECT ACFs	NONE
MPYCXJL.[NVZ].[SP]M.2SH	Rte, Rx, Ry	$Rto \leftarrow (Rx.H1 * Ry.H1 + Rx.H0 * Ry.H0)$ $Rte \leftarrow (Rx.H0 * Ry.H1 - Rx.H1 * Ry.H0)$	F1 F0
[TF].MPYCXJL.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION ONLY IF T/F CONDITION IS SATISFIED IN ACFs	NONE

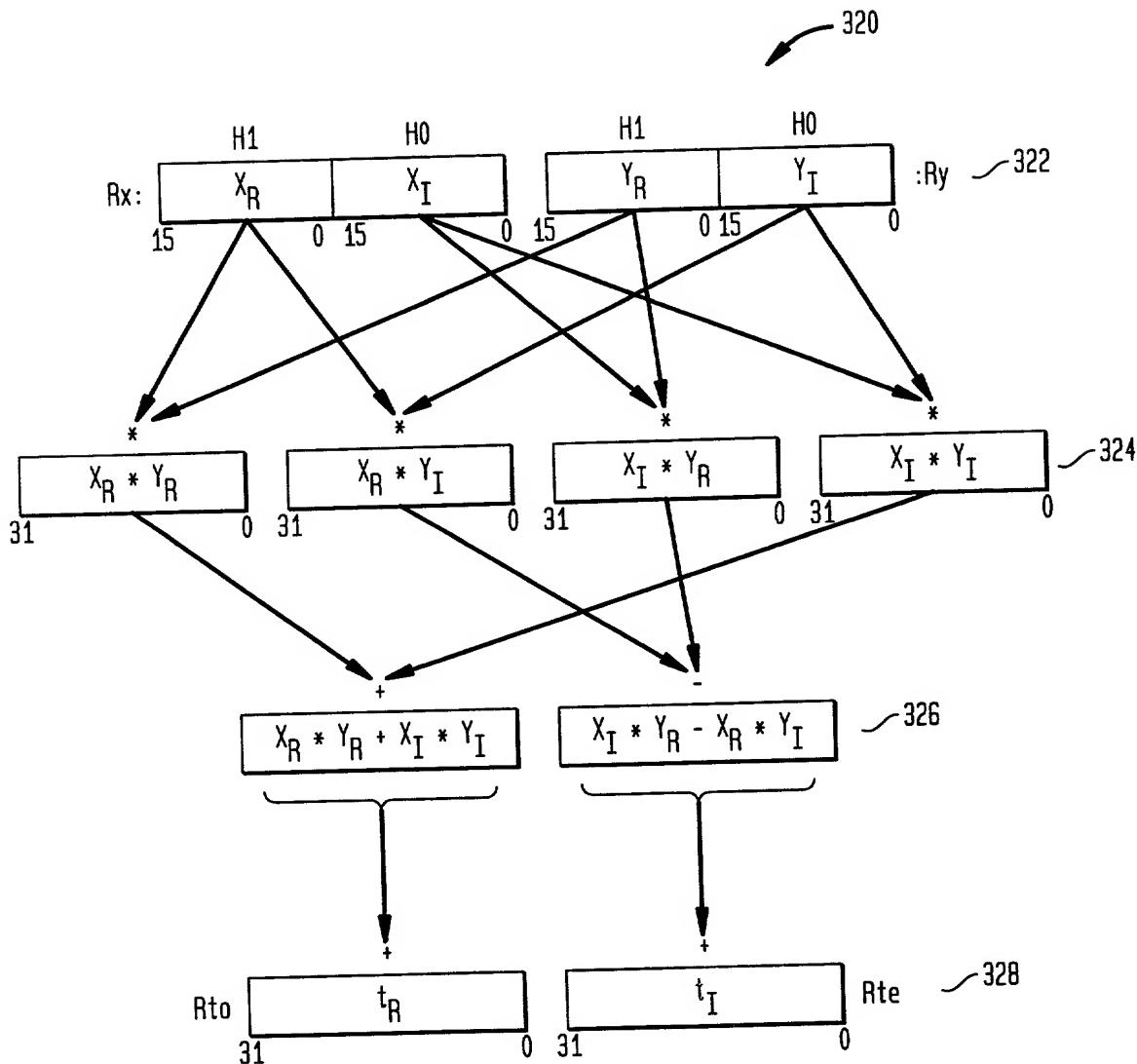
310

ARITHMETIC SCALAR FLAGS AFFECTED (ON THE LEAST SIGNIFICANT OPERAND (Rte) OR AS SPECIFIED)  
C = NOT AFFECTED  
N = MSB OF RESULT  
V = 1 IF AN INTEGER OVERFLOW OCCURS ON EITHER RESULT, 0 OTHERWISE  
Z = 1 IF A ZERO RESULT IS GENERATED, 0 OTHERWISE  
CYCLES: 2

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FIG. 3C



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FIG. 4A

ENCODING																																
31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
GROUP S/P				UNIT	MAUopcode				Rte				0				Rx				Ry				CE3				ME			

FIG. 4B

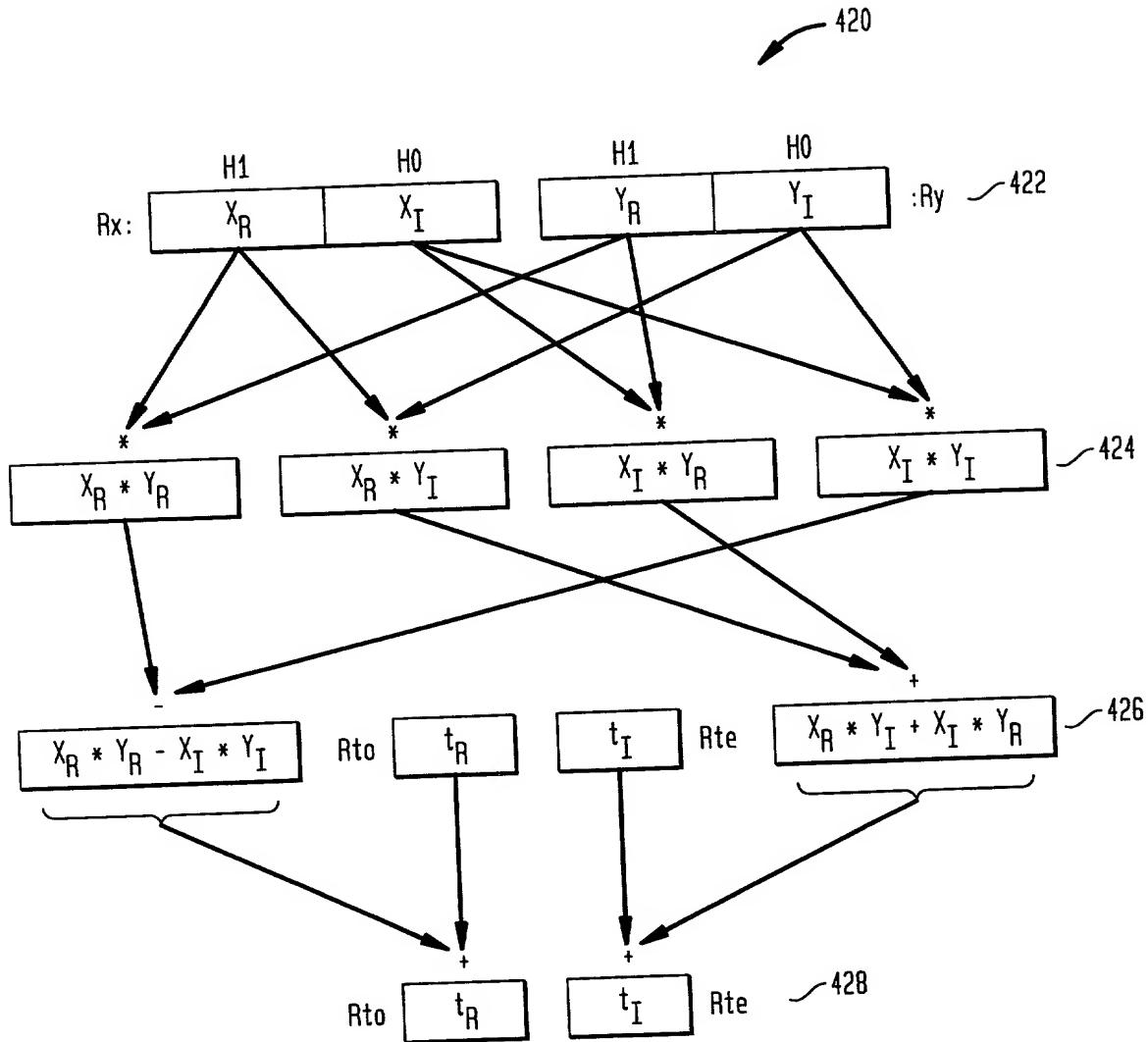
SYNTAX/OPERATION			
INSTRUCTION	OPERANDS	OPERATION	
			DUAL HALFWORDS
MPYCXLA.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION BELOW BUT DO NOT AFFECT ACFs	NONE
MPYCXLA.[NVZ].[SP]M.2SH	Rte, Rx, Ry	$Rto \leftarrow Rto + (Rx.H1 * Ry.H1 - Rx.H0 * Ry.H0)$ $Rte \leftarrow Rte + (Rx.H1 * Ry.H0 + Rx.H0 * Ry.H1)$	F1 F0
[TF].MPYCXLA.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION ONLY IF T/F CONDITION IS SATISFIED IN ACFs	NONE

ARITHMETIC SCALAR FLAGS AFFECTED (ON THE LEAST SIGNIFICANT OPERAND (Rte))  
C = NOT AFFECTED  
N = MSB OF RESULT  
V = 1 IF AN INTEGER OVERFLOW OCCURS ON EITHER RESULT, 0 OTHERWISE  
Z = 1 IF A ZERO RESULT IS GENERATED, 0 OTHERWISE  
CYCLES: 2

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FIG. 4C



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FIG. 5A

500

ENCODING

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
GROUP S/P	UNIT	MAUopcode	Rte	0	Rx	Ry	CE3	ME																							

FIG. 5B

510

SYNTAX/OPERATION

INSTRUCTION	OPERANDS	OPERATION	ACF
DUAL HALFWORDS			
MPYCXJLA.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION BELOW BUT DO NOT AFFECT ACFs	NONE
MPYCXJLA.[NVZ].[SP]M.2SH	Rte, Rx, Ry	$Rto \leftarrow Rto + (Rx.H1 * Ry.H1 + Rx.H0 * Ry.H0)$ $Rte \leftarrow Rte + (Rx.H0 * Ry.H1 - Rx.H1 * Ry.H0)$	F1 F0
[TF].MPYCXJLA.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION ONLY IF T/F CONDITION IS SATISFIED IN ACFs	NONE

ARITHMETIC SCALAR FLAGS AFFECTED (ON THE LEAST SIGNIFICANT OPERAND (Rte))

C = NOT AFFECTED

N = MSB OF RESULT

V = 1 IF AN INTEGER OVERFLOW OCCURS ON EITHER RESULT, 0 OTHERWISE

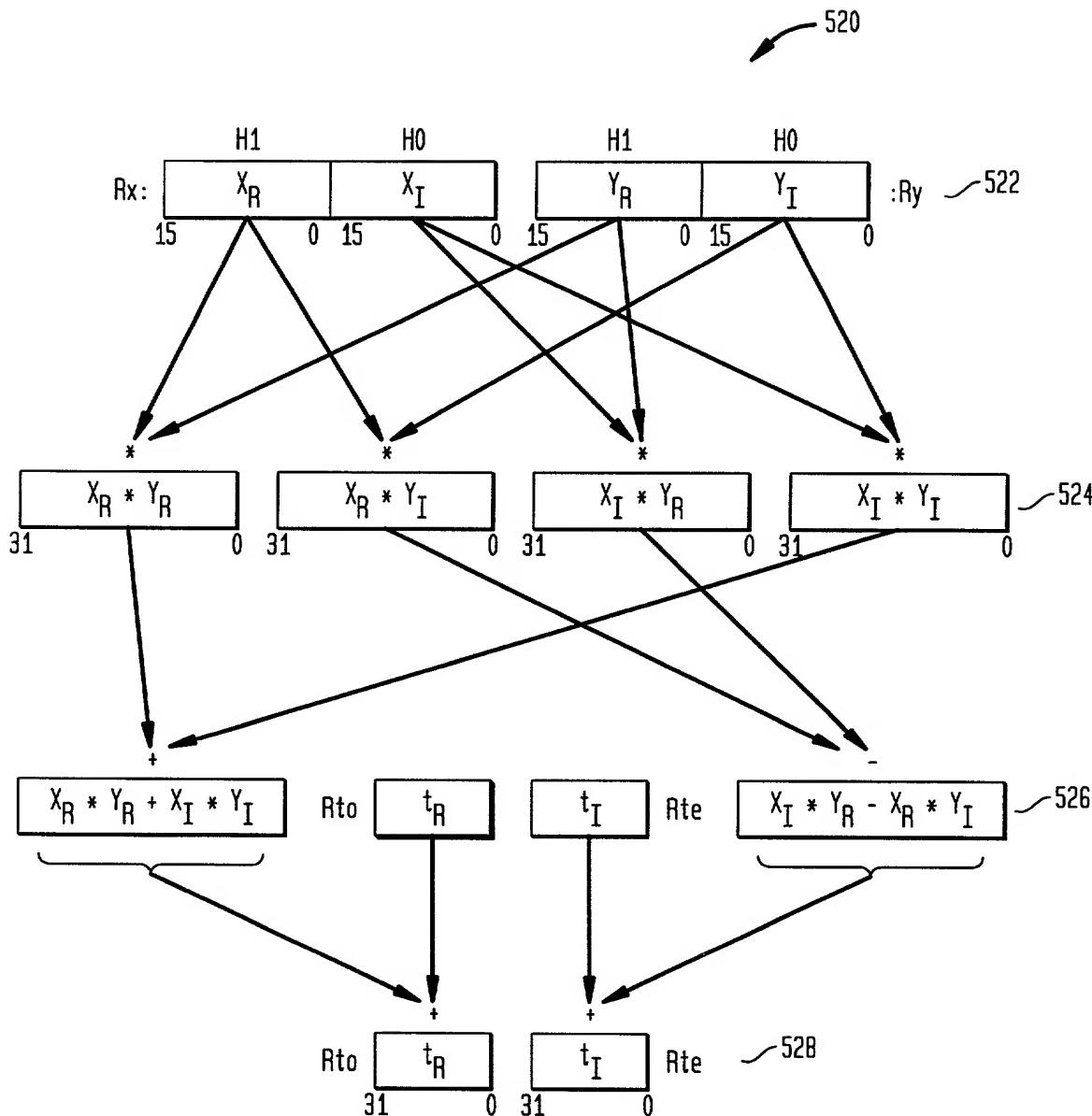
Z = 1 IF A ZERO RESULT IS GENERATED, 0 OTHERWISE

CYCLES: 2

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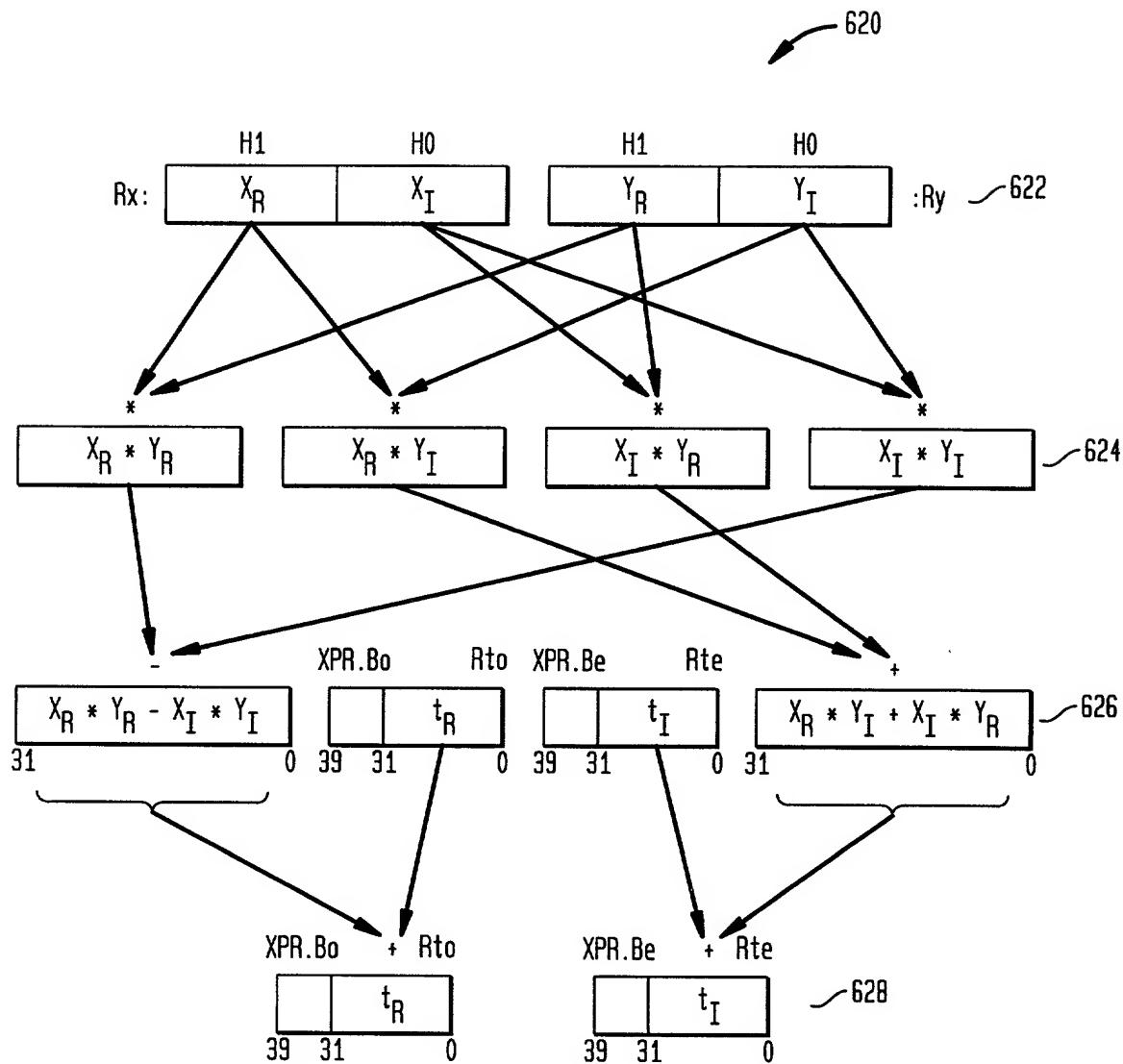
FIG. 5C



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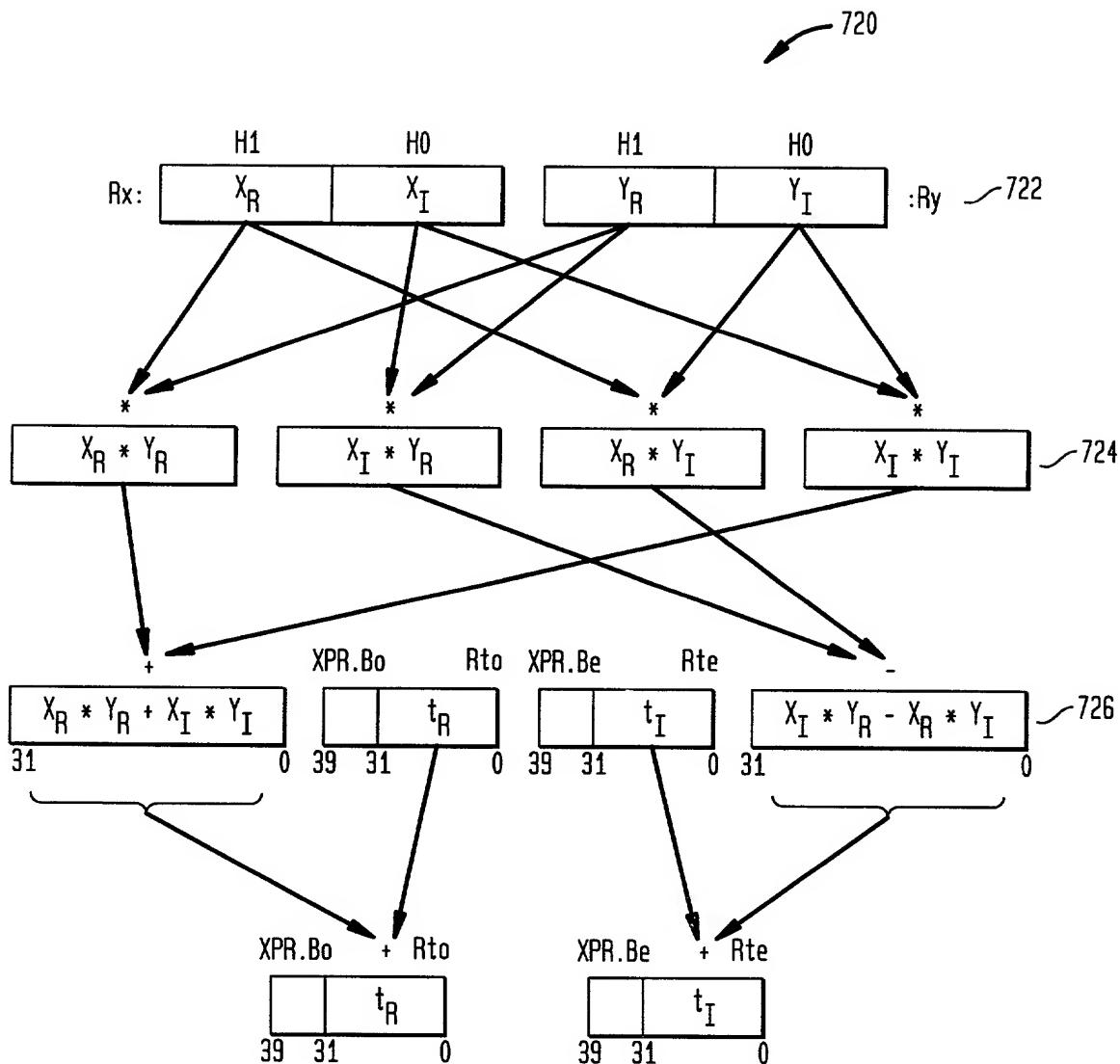
FIG. 6C



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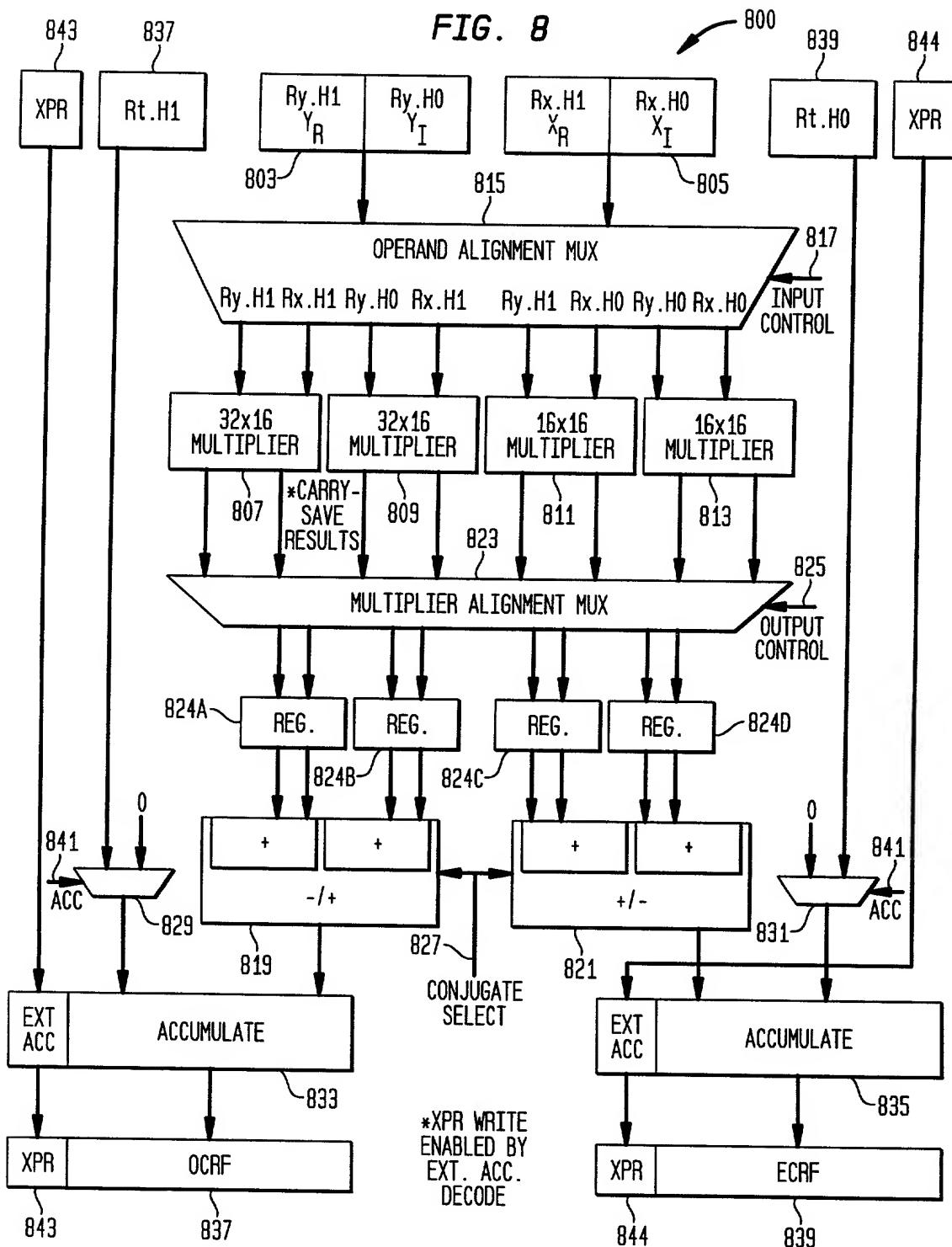
FIG. 7C



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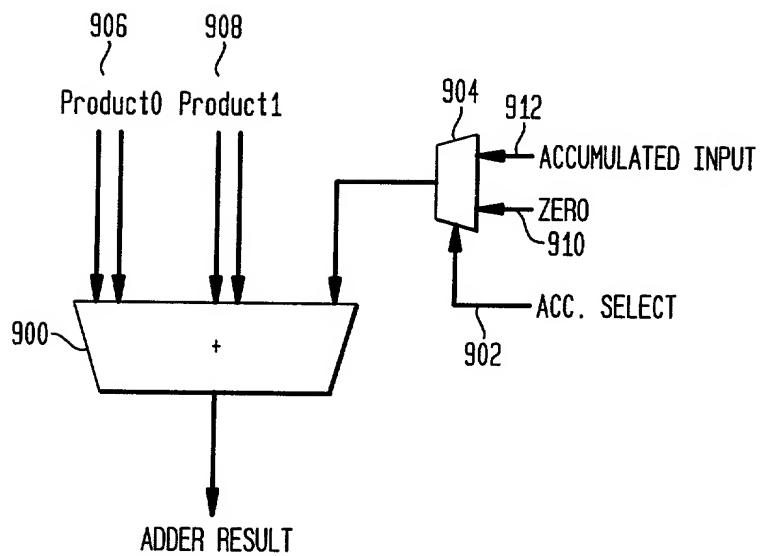
FIG. 8



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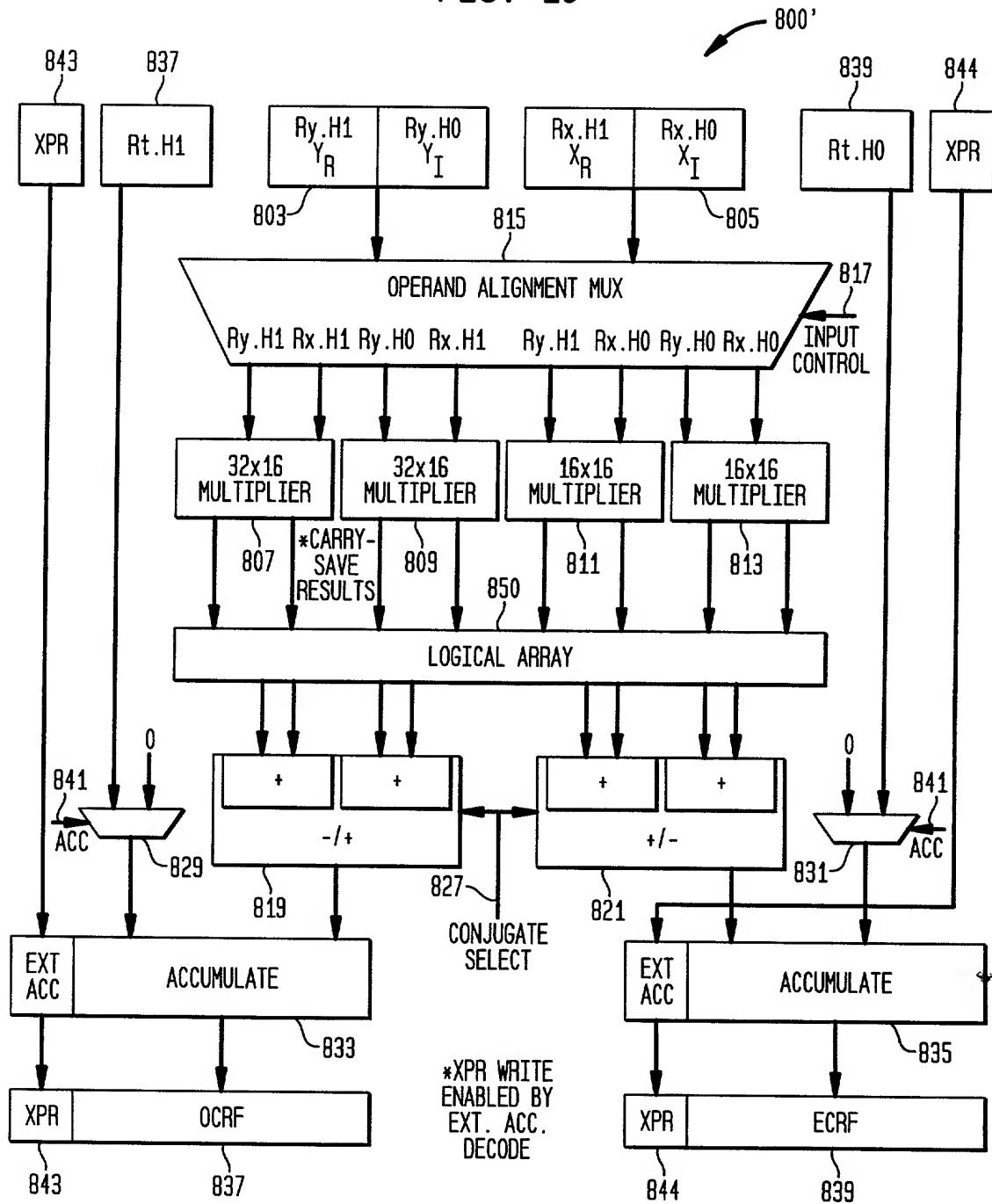
FIG. 9



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FIG. 10



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FIG. 11A

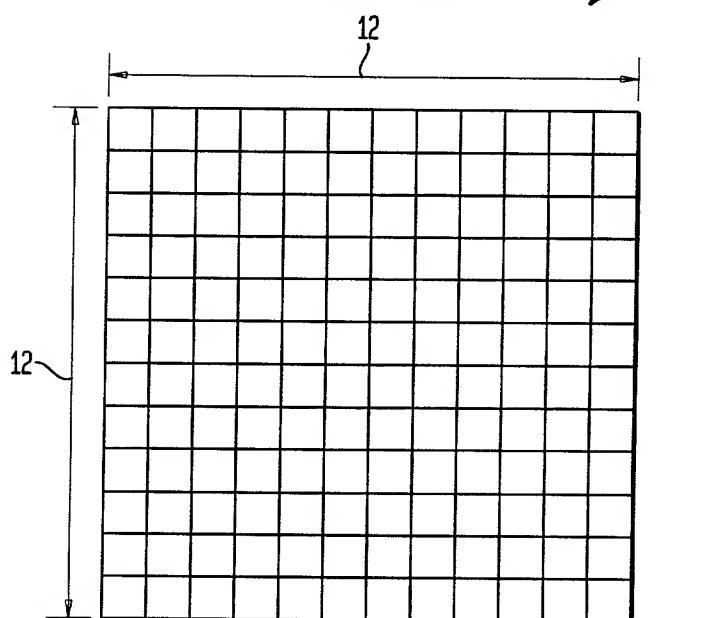
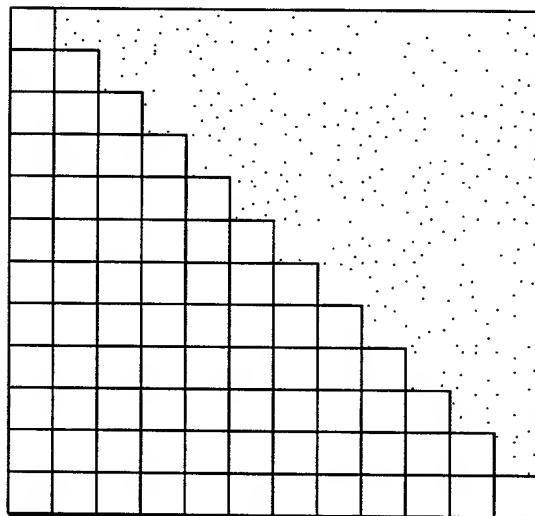


FIG. 11B



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FIG. 11C

1100

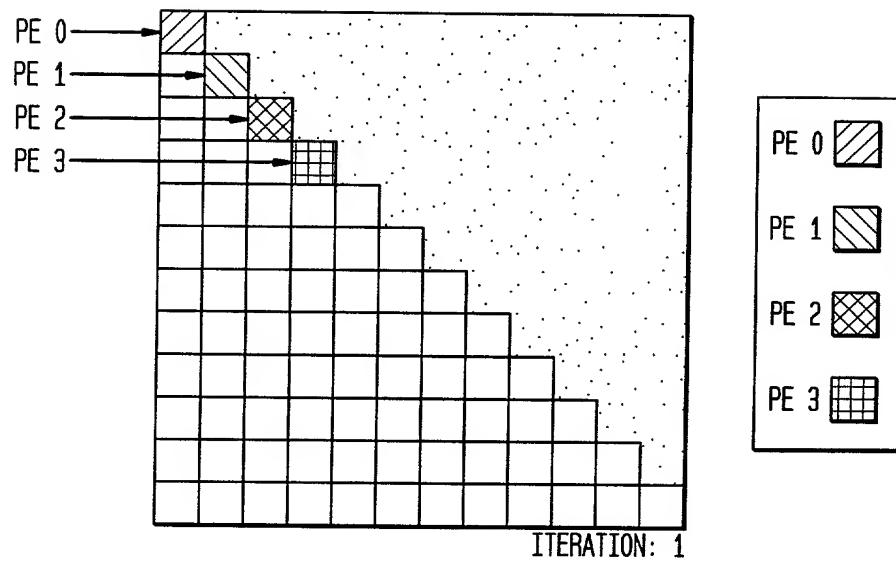
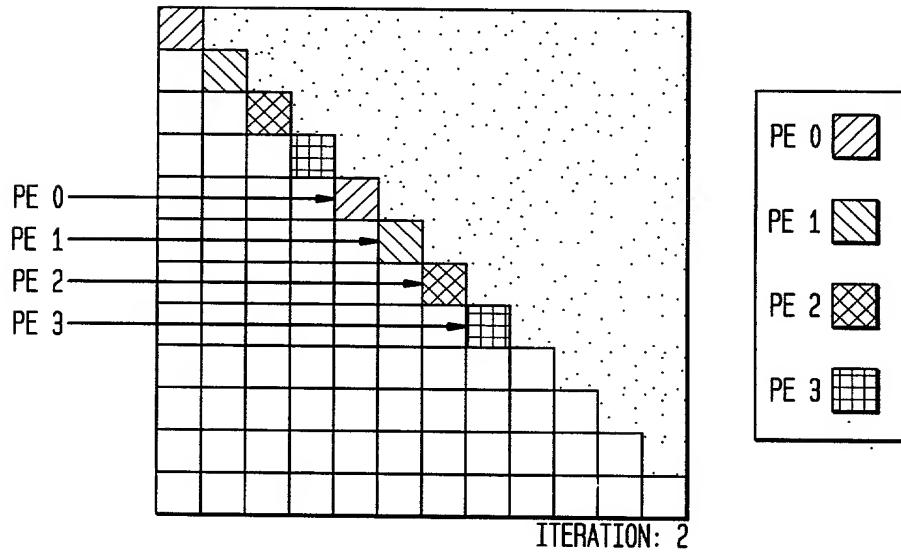


FIG. 11D

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FIG. 11E

1100

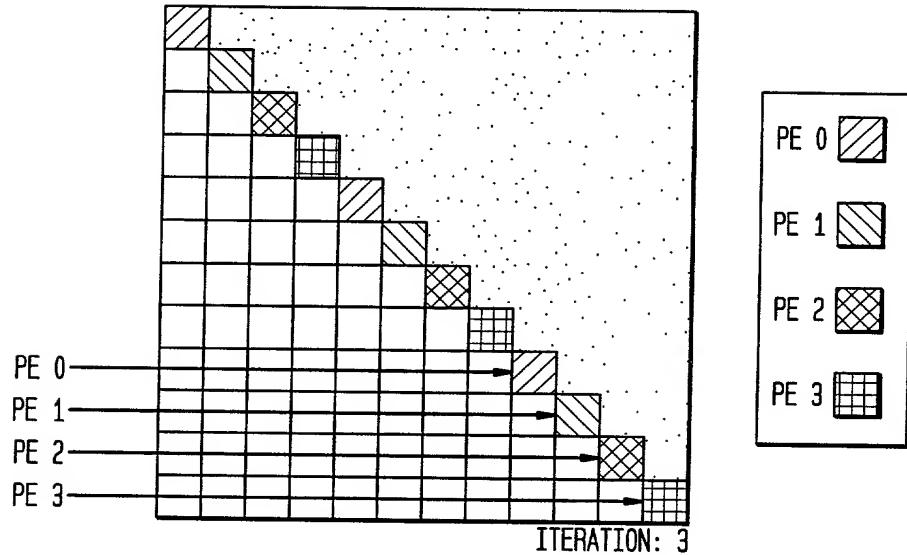
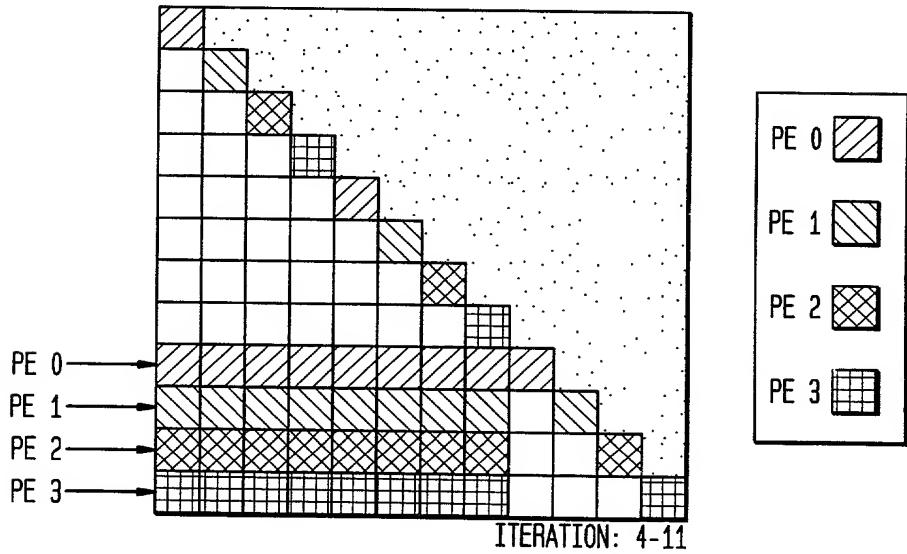


FIG. 11F

1100



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FIG. 11G

1100

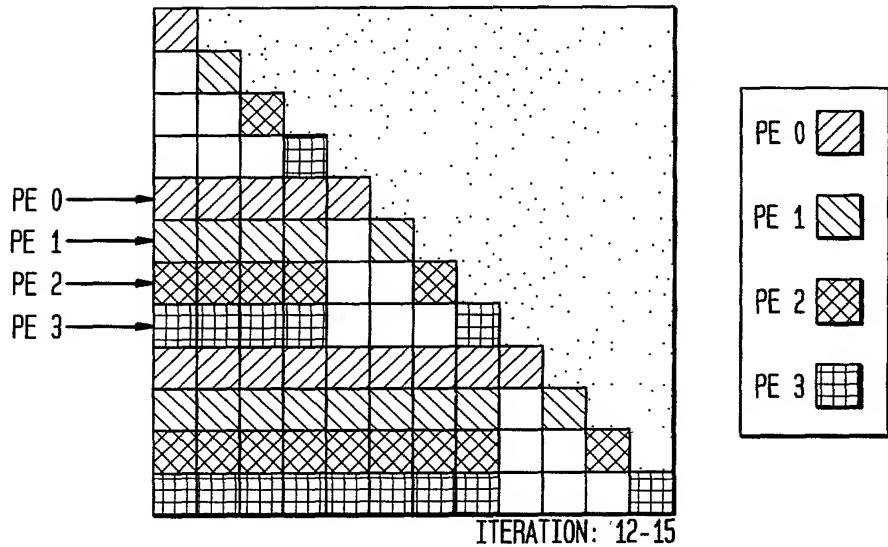
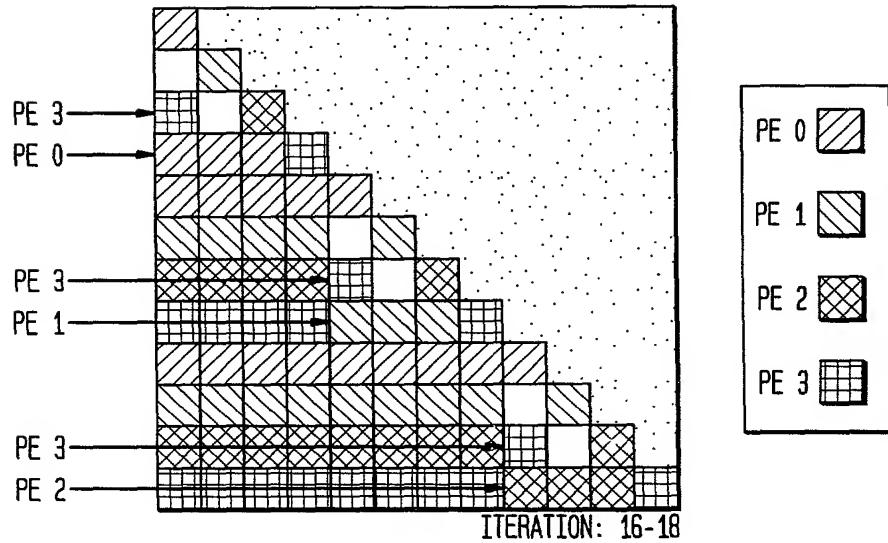


FIG. 11H

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FIG. 11I

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